

### ABSTRACT

There is provided a self driving energy direct conversion system capable of restricting global warming by using a recycle-type and open-system thermoelectric effect device which uses a natural heat energy (reusable, non polluting, and omnipresent) and  
5 which is capable of obtaining an energy source. With a group of Peltier effect elements separated at a certain distance and a group of Seebeck effect elements separated at a certain distance, a heat energy transfer section, a power generator section, and an electrolysis section are provided. Making artificially a heat energy transfer, an electric potential energy conversion, and a chemical potential energy source (of a hydrogen gas  
10 and an oxygen gas) allows use of the heat energy, an electric power and a chemical potential energy. Hereinabove, the chemical potential energy source is made by a water electrolysis circuit using water that is easy to pressurize, compress, store, accumulate and convey.